

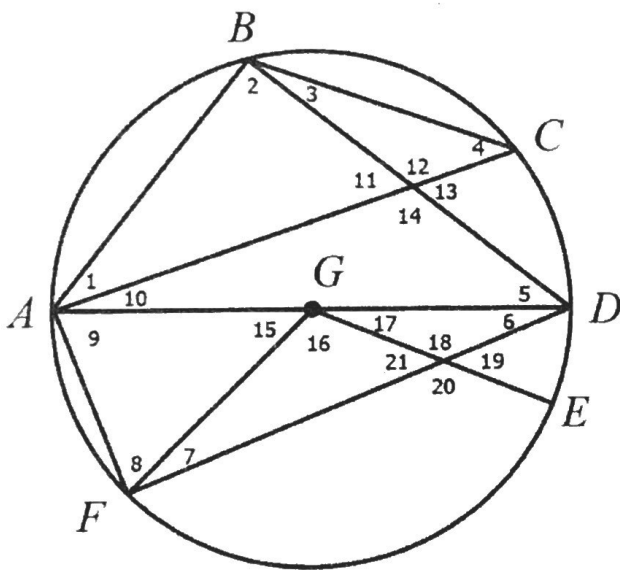
Inscribed Quadrilaterals

	<p>If a quadrilateral is inscribed in a circle, then its opposite angles are <u>Supplementary</u></p> <p>$m\angle A + m\angle C = 180^\circ$ and $m\angle B + m\angle D = 180^\circ$</p>
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Directions: Find each value or measure.

<p>1.</p> <p>$m\angle J = 88^\circ$ $m\angle K = 135^\circ$</p>	<p>2.</p> <p>$m\angle P = 72^\circ$ $m\angle R = 108^\circ$ $m\angle S = 87^\circ$</p>
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The Giant Circle CHALLENGE!



Find each angle measure!

- | | |
|-------------------|--------------------|
| $m\angle 1 = 30$ | $m\angle 12 = 120$ |
| $m\angle 2 = 90$ | $m\angle 13 = 60$ |
| $m\angle 3 = 21$ | $m\angle 14 = 120$ |
| $m\angle 4 = 39$ | $m\angle 15 = 48$ |
| $m\angle 5 = 39$ | $m\angle 16 = 105$ |
| $m\angle 6 = 24$ | $m\angle 17 = 27$ |
| $m\angle 7 = 24$ | $m\angle 18 = 129$ |
| $m\angle 8 = 66$ | $m\angle 19 = 51$ |
| $m\angle 9 = 66$ | $m\angle 20 = 129$ |
| $m\angle 10 = 21$ | $m\angle 21 = 51$ |
| $m\angle 11 = 66$ | |

Given: G is the center of the circle
 \overline{AD} is a diameter, $m\widehat{AB} = 78^\circ$,
 $m\widehat{FE} = 105^\circ$, $m\widehat{ED} = 27^\circ$, $m\widehat{CD} = 42^\circ$

7.2 Central vs Inscribed Angles

Name: _____

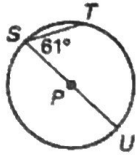
1. Multiple Choice In the figure shown, which statement is true?

- A. $\angle SPR \cong \angle PSQ$ **B. $\angle ROS \cong \angle RPS$**
 C. $\angle RPS \cong \angle PRQ$ D. $\angle PRQ \cong \angle SQR$

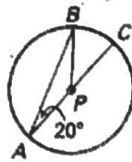


Find the measure of the indicated angle or arc in $\odot P$.

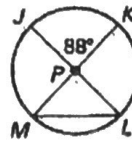
2. $m\widehat{ST} = 58^\circ$



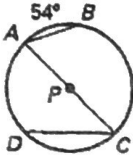
3. $m\widehat{AB} = 140^\circ$



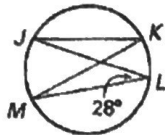
4. $m\angle JLM = 46^\circ$



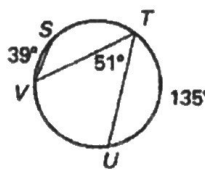
5. $m\angle A = 63^\circ$



6. $m\angle K = 28^\circ$

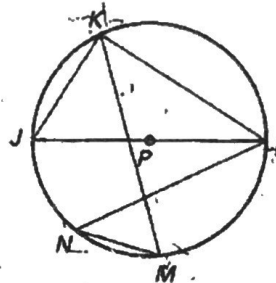


7. $m\widehat{VST} = 123^\circ$



Find the measure of the indicated angle or arc in $\odot P$, given $m\widehat{LM} = 84^\circ$ and $m\widehat{KN} = 116^\circ$.

8. $m\angle JKL = 90^\circ$ 9. $m\angle MKL = 42^\circ$
 10. $m\angle KMN = 58^\circ$ 11. $m\angle JKM = 48^\circ$
 12. $m\angle KLN = 58^\circ$ 13. $m\angle LNM = 42^\circ$
 14. $m\widehat{MJ} = 96^\circ$ 15. $m\widehat{LKJ} = 180^\circ$



In Exercises 16-18, find the values of the variables.

16. $X=14$ $Y=38$

17. $X=58$ $Y=29$

$X=72$ $Y=90$

In Exercises 19-21, find the values of the variables.

19. $X=39$ $Y=29$

20. $X=16$ $Y=14$

21. $X=6$ $Y=36.5$

22. Multiple Choice What is the value of x in the figure shown?

- A. 7 B. 12
 C. 16 **D. 21**

